IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA Alexandria Division

COREPEX TECHNOLOGIES, INC. Plaintiff,))) Case No. 1:17-CV-00026-LMB-MSN
v.))
WH ADMINISTRATORS, INC.)
Defendant.)))

PLAINTIFF'S MOTION TO EXCLUDE DR. ATIF HASHMI'S OPINIONS

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I. INTRODUCTION

Defendant WH Administrators, Inc. ("Defendant" or "WH") designated expert, Dr. Atif

Hashmi – a gentleman with excellent credentials in technologies other than the relevant

technology – to provide expert an opinion related to the originality of the ETR and ETRC

software programs that were developed using the Oracle Application Express tool. *See* Hashmi

Report, Exhibit A. Dr. Hashmi has, at best a rudimentary understanding of Oracle Application

Express, and therefore is not qualified. In fact, Dr. Hashmi readily admits he has no experience

with Oracle Application Express, and it became painfully obvious during his deposition that does

not understand it well. Even if Dr. Hashmi did understand APEX, the majority of his opinions

are not even about the copyrighted software at issue, but rather are about other development

Corepex did that has nothing to do with the copyrighted software, and is therefore not the subject

of this lawsuit. Additionally, and importantly, Dr. Hashmi completely ignored the metadata in

the copyrighted works, despite admitting that the metadata is where the unique creative work

component of software development would be reflected. In other words, Dr. Hashmi entirely

failed to inspect the unique work created by Corepex in his analysis.

Corepex Technologies, Inc. ("Plaintiff" or "Corepex") seeks to exclude Dr. Hashmi's opinions on both the ETR and ETRC programs due to his lack of qualifications and expertise on the platform utilized to develop both programs and export the code granted copyright protection by the United States Copyright Office, Oracle Application Express ("APEX" or "Oracle APEX"). The APEX platform is an intricate and incredibly complex platform which members of the field have devoted their lives to working with and understanding. Dr. Hashmi makes no express or implied reference in his report or curriculum vitae of having ever worked with Oracle

or Oracle APEX, he admitted the same in his deposition, and his opinions on Oracle APEX's use as an application development tool is inadmissible as expert testimony as he is not an expert in the relevant field. Further, Dr. Hashmi's flawed methodology in drawing his conclusions, focus on code development not related to the copyrighted software at issue, and lack of experience as an expert witness contribute to his inability to opine on the issues brought forward in this case.

II. LEGAL STANDARD

A. Rule 702 and Daubert

Under Rule 702 of the Federal Rules of Evidence, witnesses qualified as experts "by knowledge, skill, experience, training, or education" can testify if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

Under Rule 702 and *Daubert*, the trial court acts as a "gatekeeper" to determine "whether the reasoning or methodology underlying [an expert's] testimony is scientifically valid and whether that reasoning or methodology can properly be applied to the facts at issue." *Daubert v. Merrell Dow Pharms.*, *Inc.*, 509 U.S. 579, 592-93 (1993). The Supreme Court in *Daubert* charged trial courts with determining whether scientific expert testimony under Rule 702 is "not only relevant, but reliable." *Id.* at 589. The Court's role includes determining whether the expert possesses some specialized knowledge such that his or her testimony will be helpful to the trier of fact and, if so, whether that knowledge arises from reliable methods applied in a reliable manner. *Id.* at 590-91; see also *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 149 (1999) (extending *Daubert* to all expert testimony).

The Court in *Daubert* presented a nonexclusive list of four factors for lower courts to use in determining whether a theory or technique will assist a trier of fact understand and determine a fact in issue. *Daubert* at 593-94. These factors include: whether the technique can be and has been tested; whether the technique has been subjected to peer review; the rate of error from the technique's use; and the general acceptance of the practice in the field. *Id*.

In *GE v. Joiner* the Court held that neither Fed. R. Evid. 702 nor *Daubert* require a court "to admit opinion evidence connected only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between data and the opinion proffered." *GE v. Joiner*, 522 U.S. 136, 146 (1997). It is within the district court's discretion to conclude whether an expert opinion has relied on sufficient methods or studies to reach its conclusion, or if the analytical gap is indeed too great. *ePlus, Inc. v. Lawson Software, Inc.*, 764 F. Supp. 2d 807, 813 (E.D. VA 2011) (citing *Joiner* at 147).

III. DR. HASHMI'S ORIGINALITY OF SOFTWARE OPINIONS SHOULD BE EXCLUDED

A. Dr. Hashmi Has Not Worked with the Oracle Database nor Used Oracle Application Express (APEX)

The Oracle Corporation is a multi-national computer technology corporation which operates in dozens of countries around the world and reported a revenue of over 37 billion dollars in 2016.¹ The Oracle Application Express is ". . . Oracle's primary tool for developing [w]eb applications with SQL [Structured Query Language] and PL/SQL [Procedural Language/Structured Query Language]." APEX utilizes metadata created by developers, stored within the Oracle database, to generate unique web based applications ranging from the simplest

¹ Ken Bond, Financial News Details, Oracle: Investor Relations, (July 17, 2017, 1:48 pm), http://investor.oracle.com/financial-news/financial-news-details/2016/.

² Chitanya Koratamddi, Oracle Application Express 5.0 Overview, Oracle White Paper (April 2015), http://www.oracle.com/technetwork/developer-tools/apex/learnmore/apex-50-overview-2526922.pdf.

programs to large, complex, intricate software systems. *Id.* Oracle APEX is a unique, multifaceted software development tool which has spurned numerous books, community forums, video tutorials, along with online and in person training sessions.³ Hundreds of thousands of customers around the globe and both small businesses along with large corporations utilize Oracle products, services, and training tools to excel in their commercial ventures.

Dr. Hashmi conceded in his deposition, that prior to being engaged in this case, he has never previously used the Oracle Database or Oracle APEX development tool in any fashion. Hashmi Depo. Tr., attached as **Exhibit B**, 16:13-17:3; 19:11-15 (July 14, 2017). Further, Dr. Hashmi admitted that that building a [software application] in APEX would consist of a different process than any other development platform. *Id.* at 21:13-16. However, when asked what the differences between APEX and another development tool are when building applications Dr. Hashmi responded that he didn't know. Specifically, Dr. Hashmi stated he couldn't "pinpoint the differences" and wished to refrain from "guess[ing] the differences" between APEX and other allegedly similar platforms he has used. *Id.* at 18:12-21.

The primary requirement for expert testimony is that "the expert's scientific, technical, or other specialized knowledge will help the trier of fact understand the evidence." Fed. R. Evid. 702(a). Dr. Hashmi, who has admitted to never using the software development tool at issue in this case and could not, at deposition, even speculate on the differences between the software development tools he has used and APEX, does not meet this standard. A trial court, or "gatekeeper," ensuring that expert testimony is both "relevant and reliable" must hold that Dr.

nttps://education.oracie.com/pis/web_prod-piq-dad/ou_product_category.getPage?p_cat_id=1/2, (July 20, 201/, 8:57 am).

³ Riaz Ahmed, Cloud <u>Computing Using Oracle Application Express</u> (2016); Edward Sciore, <u>Understanding Oracle APEX 5 Application Development</u> (2015); Marcel Van Der Plas & Michel Van Zoest, <u>Oracle APEX Cookbook – Second Edition</u> (2013); Oracle University: Oracle APEX Training Courses, https://education.oracle.com/pls/web_prod-plq-dad/ou_product_category.getPage?p_cat_id=172, (July 20, 2017,

Hashmi's report, conclusion, potential testimony is neither. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 199 (4th Cir. 2001).

Opposing counsel will likely attempt to argue that Dr. Hashmi's experience in other areas of application development garner him enough requisite expertise to opine in reference to the particular software development platform at issue in this case, but this is not so because Dr. Hashmi's expertise in telecommunications software development has no bearing on his ability to serve as an expert on the APEX platform at issue here. The Eleventh Circuit held in Montgomery v. Noga, that even subsections of the same or similar field of practice can be "totally distinguishable" and required the exclusion of an expert witness, Montgomery v. Noga, 168 F.3d 1282, 1303 (11th Cir. 1999) (holding no error occurred following the district court's preclusion of a witness as an expert in a specific area of software licensing despite his expertise in another, similar, area of software licensing). Because Dr. Hashmi, by his own deposition testimony, admits he cannot speak to the particular functions of APEX software development tool used in this case or the differences between it and those software development tools with which he is familiar, he is not qualified to give "expert" testimony on the function and development of the copyrighted software, ETR (TXu 2-016-398) and ETRC (TXu 2-016-399), created with that development platform.

B. Dr. Hashmi Did Not Compare the Metadata Of ETR/ETRC and f159.sql Nor Their Functions

i. Metadata

Dr. Hashmi defined the term metadata, in this context, as the actions a developer takes in creating an application within the APEX platform. Hashmi Depo. Tr. 48: 8-12 (July 14, 2017). Dr. Hashmi agreed that the outcome of different development decisions and actions taken by a software developer, all of which result in the creation of metadata, would create independent and

distinct applications with different functionalities. *Id.* at 48:13-18. Dr. Hashmi went on to state that metadata, due to the constructs of the laws of physics, can only be arranged so many ways, but when analyzing metadata of two "unique" applications there would be quite "a lot of differences" between their export files. *Id.* at 69:2-70:2. Therefore, when reviewing metadata an analyst is reviewing the individual changes and actions taken by a developer to create the application as a whole. This process then, is a requisite vital step in the investigation into the originality of the copyrighted software at issue in this case. However, as Dr. Hashmi admits, when running his comparison of the ETR and ETRC with a third application he purposefully did not analyze the metadata associated with the code. *Id.* at 45:9-13; 45:21-46:1. Overall, this shortcoming means that Dr. Hashmi's analysis does not even touch upon what the Corepex developers actually did or created through their work.

Dr. Hashmi bases much of his opinion on the originality of the copyrighted software on comparisons he ran using BeyondCompare (a third party internet search tool) between the APEX export files of both the ETR and ETRC with an open source APEX application, f159.sql (APEX-SERT). Hashmi Expert Report, 15, June 14, 2017. When Dr. Hashmi compared both the ETR and ETRC files with APEX-SERT he specifically chose not to compare the metadata of the applications, but instead compared the basic APEX export file derived from the Oracle database without any substantive changes made upon them. Hashmi Depo. Tr. 54:8-19, (July 14, 2017). Dr. Hashmi's tests, unsurprisingly, showed a large number of similarities between the applications. Hashmi Expert Report, 15-17 ¶43-44 (June 14, 2017).

Dr. Hashmi conceded that the analysis of two APEX export files of two completely undeveloped applications would appear to be very similar. *Id.* at 46:13-21. The differences, he stated between these files would come from the metadata entered in the APEX platform by

software developers. *Id.* at 54:20-22. Dr. Hashmi's decision to exclude metadata from his analysis, by his own admission, means that the two similar APEX export files, when reviewed in tandem with their corresponding metadata, may show that the applications have completely different functionalities. *Id.* In fact, Dr. Hashmi concedes the point that a different arrangement of metadata between two files would certainly result in two different applications. *Id.* at 55:11-13. Further still, Dr. Hashmi agreed that two export files of developed applications, without metadata, would show "significant similarit[ies]" between two pages of the same title despite having vastly different outward appearances. *Id.* at 58:15-59:3.

ii. Functions of ETR/ETRC and f159.sql

During his analysis, Dr. Hashmi failed to ever run the APEX-SERT application he referred to extensively in his report. Dr. Hashmi admitted to not knowing the functions of the software he was retained to compare, nor did he take the time to run the APEX-SERT file which he used as comparison with the ETR and ETRC files. Hashmi Depo. Tr. 57:7-20; 58:13-14 (July 14, 2017). The APEX-SERT is a security tool that scans APEX applications for potential security vulnerabilities. Spendolini Expert Report, **Exhibit C**, 19, (May 22, 2017). To the best of his knowledge Dr. Hashmi knew only that APEX-SERT looked for "SQL injections" but could not give any further details to the program's function. Hashmi Depo. Tr. 55:18-56:2 (July 14, 2017). Dr. Hashmi testified that he at least took the time to run both the ETR and ETRC applications for a brief period of time and he described his activity in the system as "playing" around with the different features of the applications. *Id.* at 58:1-6. "Playing" around with the applications on a superficial level developed on a platform with which he is completely unfamiliar does not render Dr. Hashmi an expert on the relevant subject matter. His knowledge of the applications' functions consists of knowing that "there are different options you can click

on..." and "data is displayed. . .in [the] form of the reports on the screen." *Id.* at 58:1-12. It is difficult to discern how Dr. Hashmi could possibly be qualified as it is likely a lay witness daily user of the system would have more knowledge of the workings of the system than Dr. Hashmi who only "played" around with the system for a brief time on a superficial level.

Dr. Hashmi's analysis, report and testimony completely ignores the actual development component which is reflected in the code by embedded metadata. In other words, the metadata is the essence unique creation by developers and Dr. Hashmi completely ignored it. Because Dr. Hashmi admits that he did not compare the unique data and code created by Corepex's developers neither he nor his report can be relied upon. His analysis of the APEX export files without metadata merely compared the containers of the three applications (ETR, ETRC, and APEX-SERT) while intentionally ignoring their actual unique contents which could have been discerned had he actually looked at the thing that evidences what developers have actually done — *i.e.*, the metadata. Putting aside Dr. Hashmi's unavailing comparison of the programs without their metadata, Dr. Hashmi cannot even opine on the functionality of the programs because he did not take the time to actually run and review the applications in their normal operating capacity. The expert report of Dr. Hashmi is not one based upon "sufficient facts and data" to provide a comprehensive analysis of the issues in the case and would confuse or distract the trier of fact. Fed. R. Evid. 702(b).

C. Dr. Hashmi Did Not Utilize Oracle APEX's Own Software Comparison Tool to Compare The ETR/ETRC Code to A Third APEX Application

Dr. Hashmi's lack of expertise in the use of Oracle products and APEX revealed itself yet again when Dr. Hashmi admitted he did not use nor know of the existence of APEX's internal application comparison tool. Hashmi Depo. Tr. 63:22-64:7 (July 14, 2017). Dr. Hashmi utilized the "industry standard" comparison tool, BeyondCompare, in his analysis of the ETR and ETRC.

Hashmi Expert Report, 14, (June 14, 2017). This comparison tool may be the program which Dr. Hashmi uses in his personal work, however this \$50 online tool is not the industry standard for Oracle APEX applications. As early as APEX 3.0, developers using APEX to build applications have had the ability to compare multiple APEX applications using an internal comparison tool.⁴ An Oracle expert, along with any professional software developer who has used the APEX platform within the last seven years would know of this function and would have likely used it in an analysis and comparison of different APEX applications.

In contrast to Dr. Hashmi's approach, the APEX comparison tool compares the metadata, information actually entered into the platform by developers, of both applications. *Id.* When a comparison between the ETR and APEX-SERT programs was run using the APEX comparison tool, the results showed innumerable differences in the two programs' respective code. Exhibits 6, 7 to Hashmi Depo. (July 14, 2017). When the metadata of the APEX based programs were compared, using the tool APEX designed for such a comparison, the results showed that the two programs were vastly different. The processes Dr. Hashmi used to reach his conclusion in his report regarding the originality of the ETR and ETRC programs were not the standard practice for comparing APEX applications. His choice in comparison tool was not made after review of the APEX internal tool, but in blissful ignorance of its existence. If ever there were a situation for the Court to exercise its discretion as a "gatekeeper" to keep unreliable an irrelevant expert testimony from admittance at trial this is it.

D. Dr. Hashmi's Report Focuses Upon Software Components and Functions Not at Issue in The Case

⁴ Oracle Help Center: Oracle Application Express Release 3.0 New Features, https://docs.oracle.com/cd/B32472_01/appdev.300/b32471/what_new.htm, (July 20, 2017, 2:12 pm).

Dr. Hashmi's report is 79 pages long supplemented with over five thousand pages of exhibits. Hashmi Expert Report (June 14, 2017). However, Dr. Hashmi allotted a mere seven pages to his opinion regarding the originality of the copyrighted ETR and ETRC programs. *Id.* at VI(B) 15-22. To put this into perspective, Dr. Hashmi's analysis of the originality and copyrightability of the software at issue in the case constituted less than 10% of his report and was less than the analysis which he put towards his opinion on the quality of internal comments Corepex staff made while developing other code that was not part of the copyrighted ETR and ETRC programs. *Id.* (referring to sections VI (C)(1), (5)). Dr. Hashmi appears to have been under the impression that the scope of his report was to include discussion of the quality of code other than the ETR and ETRC code, when in fact, that is not at issue in this case. *Id.* at 1; Compl. ¶ 1. At no point in the Complaint, Defendant's Answer and Affirmative Defenses, nor Defendant's Motion to Dismiss, is the quality of the ETR or ETRC brought up more than a single reference in one sentence of these pleadings, but Dr. Hashmi's report doesn't even address the quality of the ETR and ETRC code but instead analyzes other code files. See Dkt. 1; Dkt. 24; Dkt. 11; Dkt. 12, 2.

Dr. Hashmi's in-depth discussion of the quality of code is at best irrelevant and at worst time-consuming and distracting. This tedious and subjective analysis is exactly the type of "expert" testimony which the *Daubert* and *Kuhmho* Court's set out to limit as irrelevant in resolving issues brought forth in complex litigation. *Daubert* at 597; *Kumho* at 147. "Relevant Evidence" is defined in Fed. R. Evid. 401 as relevant if, a) it has any tendency to make a fact more or less probable than it would be without evidence; and b) the fact is of consequence in determining the action. Fed. R. Evid. 401(a)(b). The Complaint alleges copyright infringement and violations of 17 U.S.C. § 501, *et seq*. Compl. ¶ 1. The Defendant's Answer and Affirmative

Defenses list a litany of alleged defenses to these claims but at no point discuss the lack of quality of the copyrighted code as rationale for any of the Defendant's arguments. Dkt. 24. Even if the quality of code were a relevant issue in the case, Dr. Hashmi's report is still unreliable because he specifically chose not to analyze the code which was created and copyrighted by Corepex and its developers. Hashmi Depo. Tr. 45:9-13; 45:21-46:1; 48: 8-12 (July 14, 2017).

This misplaced focus in Dr. Hashmi's analysis is an understandable one considering his lack of requisite skills or experience with the software, and platform at issue in this case. Hashmi Depo. Tr. 16:13-17:3; 19:11-15 (July 14, 2017); Fed. R. Evid. 702(a). When the irrelevant portions of Dr. Hashmi's report are trimmed, the result becomes a skeleton of an expert report with minimal analysis on the issues surrounding the litigation. Because Dr. Hashmi either misunderstood or was misinformed on the scope of the issues presented in this case, the vast majority of his report is irrelevant and should be excluded. When put in context with the other deficiencies of Dr. Hashmi's report and lack of expertise in general the argument for Dr. Hashmi's exclusion as unreliable becomes insurmountable.

E. Dr. Hashmi Has Never Testified Nor Has Experience as an Expert

Dr. Hashmi's lack of deposition and testimonial experience harm his credibility to effectively perform his role by supporting the trier of fact make its determination. In his report Dr. Hashmi made reference to his employer/contractor Robert Zeidman, owner of Zeidman Consulting, Inc.. Zeidman Consulting is the firm with whom WH counsel is actually contracted with; Dr. Hashmi's engagement with Zeidman Consulting is as an independent contractor who receives a portion of the compensation paid to Zeidman. Hashmi Expert Report, 1 (July 14, 2017). The overlapping employment structure between Dr. Hashmi and Mr. Zeidman appears to blur Mr. Zeidman's role in the production of the expert report. WH counsel agreed to pay a

separate, much higher, rate for any advising Mr. Zeidman did in connection to the report. *Id.* Dr. Hashmi stated firmly that he alone wrote the entirety of his report but admitted to using Mr. Zeidman for advice regarding the contents of his expert report for this case. *Id.*

His inability to ascertain what information should be included in an expert report is further evidence supporting the argument that Dr. Hashmi did not understand the scope of the issues presented by both sides in this case. His continued use of Mr. Zeidman as an advisor and extensive off topic analysis throughout his report indicate that he will not be able to provide testimony of an expert with the requisite "skill" and "experience" which will "help the trier of fact understand the evidence or determine facts in issue." Fed. R. Evid. 702(a).

IV. CONCLUSION

Dr. Hashmi likely has the credentials to be a witness in a number of technology based cases, however, this is not such a case. Dr. Hashmi has never used any component or function of the Oracle Database nor Oracle Application Express. Dr. Hashmi's methods and procedures for drawing his conclusions were flawed; he did not compare the metadata of the software applications but instead specifically ignored the metadata, the very thing that evidences what Oracle APEX developers have done and created through their efforts. Dr. Hashmi did not run or fully examine the applications which he compared in his limited discussion of the programs' originality. Further, Dr. Hashmi did not use nor did he know of the existence of APEX's own internal application comparison function, instead opting for an inexpensive third-party tool. For each of these reasons and those stated above, the Court should grant Plaintiff's motion to exclude Dr. Hashmi's opinions.

Dated: August 3, 2017

By _____/s/ Thomas M. Dunlap (VSB No. 44016) Ellis L. Bennett (VSB No. 71685) David Ludwig (VSB No. 73157) W. Calvin Smith (VSB No. 46461) Ben Barlow (VSB No. 67933) DUNLAP BENNETT & LUDWIG PLLC 211 Church Street SE Leesburg, Va. 20175 (703) 777-7319 (telephone) (703) 777-3656 (facsimile) tdunlap@dbllawyers.com ebennett@dbllawyers.com dludwig@dbllawyers.com csmith@dbllawyers.com bbarlow@dbllawyers.com ATTORNEYS FOR COREPEX TECHNOLOGIES, INC.

CERTIFICATE OF SERVICE

I hereby certify that on August 3, 2017, a true copy of the foregoing was electronically filed with the Clerk of Court using the CM/ECF system.

/s/
Ellis L. Bennett
Counsel for Corepex Technologies, Inc.